

I. MAMUZIĆ – PRESIDENT  
SCIENTIFIC COMMITTEE

Survey of 10<sup>th</sup> International Symposium of Croatian Metallurgical Society (CMS)

# SHMD `2012

»Materials and Metallurgy«  
<http://public.carnet.hr/metalurg>

Šibenik 2012, June, 17 – 21  
Solaris Beach Resort, Croatia

10<sup>th</sup> International Symposium of Croatian Metallurgical Society »Material and Metallurgy« was held as a part of:

- 60<sup>th</sup> anniversary of THE FOUNDATION OF CROATIAN METALLURGICAL SOCIETY (from Society of Engineers and Technician Steel works Sisak, 1952 y)
- 60<sup>th</sup> anniversary of THE ESTABLISHMENT OF TECHNICAL UNIVERSITY, Košice, Slovakia, 1952 y
- 50<sup>th</sup> anniversary of THE ESTABLISHMENT OF MECHANICAL ENGINEERING STUDY PROGRAMS UNIVERSITY OSIJEK, Slavnonski Brod, Croatia, 1952 y
- 50<sup>th</sup> anniversary of THE FOUNDATION AND PUBLICATION OF THE JOURNAL METALURGIJA (1962 y), Zagreb, Croatia

At the 10<sup>th</sup> International Symposium of Croatian Metallurgical Society »Materials and Metallurgy« had participated following countries:

1. Argentina	25. Macedonia
2. Austria	26. Malaysia
3. Belgium	27. Mexico
4. Belarus	28. Montenegro
5. Benelux	29. Netherlands
6. Bosnia and Herzegovina	30. Philippine
7. Brasil	31. Poland
8. Bulgaria	32. Portugal
9. Chile	33. Romania
10. China	34. Russia
11. Croatia	35. Serbia
12. Czech Republic	36. Serbia/Republic of Kosovo
13. England	37. Singapore
14. Egypt	38. Slovakia
15. Finland	39. Slovenia
16. France	40. South Africa
17. Germany	41. Spain
18. Hungary	42. Sweden
19. India	43. Thailand
20. Indonesia	44. Turkey
21. Italy	45. Ukraine
22. Japan	46. USA
23. Korea	47. Vietnam
24. Lithuania	48. Wales, United Kingdom

The aim of this Symposium is to point all the possibilities of the materials and achievements in metallurgy.

TOPICS OF THE SYMPOSIUM WERE :

## Materials

New Materials  
Refractory Materials  
The Development  
Applications  
Physical Metallurgy

## Metallurgy

Process Metallurgy and Foundry  
Plastic Processing of Metals and Alloys  
Technologies  
Energetics  
Ecology in Metallurgy  
Quality Assurance and Quality Management

There were 641 reports, over 1100 authors and coauthors registered for the 10<sup>th</sup> International Symposium of the Croatian Metallurgical Society.

327 participants were present at the Symposium. Symposium activity took place through plenary lectures and four sections (poster):

Plenary lectures	9
Materials – Section »A«	321
Process Metallurgy – Section »B«	131
Plastic Processing – Section »C«	79
Metallurgy and Related Topics – Section »D«	101
	= 641

For the plenary lectures research topics were selected relating partly to the new materials and partly to the increase of efficiency of metallurgical procedures, as

well as improving of research of ferrous and non ferrous metals, selected new technologies and simulation in material forming, several plastic deformation etc.

#### PLENARY LECTURE WERE

- **J. Raab, J. Mannheim;** Czech Steel Federation, Prag, Trinecke železarny, Trinec, Czech Republic, **Dynamics in the Development of Global Steel Production & Consumption.**
- **P. Tardy;** Association of the Hungarian Steel Industry, Budapest, Hungary, **Clean technologies in the steel industry.**
- **M. Holtzer, R. Danko, S. Żymankowska-Kumon;** AGH – University of Science and Technology, Krakow, Poland **Foundry industry – corrent state and future development**
- **M. Godec, F. Vodopivec, M. Jenko;** Institute of Metals and Technology (IMT), Ljubljana, Slovenia **Progress of use of advanced research equipment IMT, Ljubljana, Slovenia**
- **R. Kawalla, M. Schmidtchen, M. Graf;** Institute of metal forming at TU Bergakademie Freiberg, Germany  
**Simulation of plastic deformation process**
- **S. V. Dobatkin, I. Mamuzić; A. A. Baikov** Institute of Metallurgy and Materials Science, Moscow Russia; University of Zagreb, Zagreb, Croatia  
**Structure and properties of ultrafine – grained aluminium alloys and possibilities of their application**
- **R. Fabik, J. Kliber, I. Mamuzić, T. Kubina, S. A. Aksenov;** VSB – TU Ostrava, Ostrava, Czech Republic; University of Zagreb, Zagreb, Croatia, MIEM, Moscow, Russia  
**Mathematic modelling of flat and shape hot rolling based on Finite Element methods**
- **D. Malindžak;** BERG Faculty, Technical University of Košice, Košice, Slovakia  
**Application of logistic principles in metallurgical production.**
- **M. Ikonić;** University of Rijeka, Croatia  
**Case study in metallurgy plants strategy formulation.**

Comprehensive outline of plenary reports (the 3 reports) were published in the journal Metalurgija 51

(2012) 3, 337-348 as the articles. The summaries of all lectures of 10 th Symposium were published also in Metalurgija 51 (2012) 3, 377-432. Total holded 303 lectures in the 10th Symposium.

For this symposium the reports were prepared by the authors and coauthors from various world universities, institutes, academies and companies. It is to be emphasised that the scientists from Croatian universities (Zagreb, Rijeka, Osijek) participated in the symposium.

In the time 10 th Symposium was also held:

- Meeting of Editorial Board of Journal Metalurgija with Promotion of Monograph »Metallurgy, always prosperity for humanity« June 18, 2012, 12 AM.  
Minutes of this Meeting, Metalurgija 52 (2013) 1, 9-10
- Annual Assembly of Croatian Metallurgical Society (15 Participants, delegates of Institute, University etc.), June 19, 2012, 6,00 PM, Metalurgija 52 (2013) 1, 4

More than 150 participants were included in a round table session on the achievements, conclusions and closing of the 10 th International Symposium »Materials and Metallurgy« (June 20, 6,00 PM).

In the discussions it was confirmed that the Symposiums organized by Croatian Metallurgical Society have become traditional assembly of experts and scientists of various profiles: metallurgists, geologists, physicists, chemists, mechanical engineers et.

Based on the analysis and evaluation of the subject matter of the symposium, the symposium has been appraised positively and it has been acknowledged that it has its place in the international exchange of knowledge.

It is reasonable to conclude that the demonstrated results of scientific and professional investigation accompanied by the complete and quality manifestations, especially discussions at the round table prove that the organizing of the 10 th International Symposium of Croatian Metallurgical Society »Materials and Metallurgy« in Šibenik 2012 June 17-21 was justified. Especially has to be emphasized that the participants will keep wonderful memories of Šibenik and Solaris Hotels.

Based on the agreement of Meeting of World Metallurgical Societys, Dusseldorf, November 2009, 2010 y, and the conclusion of the round table, the next 11 th International Symposium of Croatian Metallurgical Society »Materials and Metallurgy« will be held 2014 – June 22-26, Solaris Beach Resort, Šibenik, Croatia. (First Circular – Call for Papers, SHMD'2014, Metalurgija 52(2013)1, 5-8)